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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/595,626

05/01/2006

Tadashi Nakamura

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11/25/2009

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EXAMINER

SASINOWSKI, ANDREW

ART UNIT

PAPER NUMBER

2627

MAIL DATE

DELIVERY MODE

11/25/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |   |  |  |
|------------------------------|---|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/595,626    | <b>Applicant(s)</b><br>NAKAMURA, TADASHI |  |
|                              | <b>Examiner</b><br>ANDREW J. SASINOWSKI | <b>Art Unit</b><br>2627                  |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Yoshida et. al. [2005/0083814].

Yoshida teaches:

- A drive apparatus for performing a sequential recording for a write-once recording medium **[abstract]** the drive apparatus comprising:
- a recording/reproduction section for performing a recording operation or a reproduction operation for the write-once recording medium **[\$0028, figures 6-7];**
- a drive control section for controlling the recording/reproduction section **[\$0028, figures 6-7];**
- and a memory circuit for storing data to be recorded **[206],**
- wherein the drive control section performs a process including: receiving a recording instruction specifying at least data to be recorded **[\$0082];**
- storing the data to be recorded in the memory circuit **[\$0077];**

- defining data from a start location of the data stored in the memory circuit to a location corresponding to a next writable address as a first data portion **[\$0080, note the spare area];**
- defining data from the location corresponding to the next writable address to an end location of the data stored in the memory circuit as a second data portion **[\$0080, normal recording area of disc];**
- and controlling the recording/reproduction section to record the second data portion before recording the first data portion **[\$0080]**

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida in view of Park et. al. [2004/0076049]

Regarding claim 2, Yoshida teaches:

- A drive apparatus for performing a sequential recording for a write-once recording medium, wherein the write-once recording medium includes a spare area and a user data area **[abstract]**, the drive apparatus comprising:

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- a recording/reproduction section for performing a recording operation or a reproduction operation for the write-once recording medium **[\$0028]**;
- and a drive control section for controlling the recording/reproduction section **[figs. 6-7]**,
- wherein the drive control section performs a process including: receiving a recording instruction specifying at least a location at which data is to be recorded **[\$0082]**;
- controlling the recording/reproduction section to record the data at the determined recording location **[\$0080]**.

Yoshida does not teach:

- determining whether or not an ECC cluster including the location specified by the recording instruction is replaced by a replacement cluster;
- determining whether or not a read-modify-write process is required;
- when it is determined that the ECC cluster including the location specified by the recording instruction is replaced by a replacement cluster and the read-modify-write process is required, determining a specific location in the user data area which is close to the recording location of the replacement cluster as a recording location at which the data is to be recorded;

Park teaches:

- determining whether or not an ECC cluster including the location specified by the recording instruction is replaced by a replacement cluster **[fig. 5, replaced cluster #2 from Rec(S12), also note §0041];**
- determining whether or not a read-modify-write process is required **[§0043, note the updated management information]**
- when it is determined that the ECC cluster including the location specified by the recording instruction is replaced by a replacement cluster and the read-modify-write process is required, determining a specific location in the user data area **[fig. 5, DFL 32, note that it is in the ‘user data area’ (Data area indicated at top of figure)]** which is close to the recording location of the replacement cluster as a recording location at which the data is to be recorded **[fig. 5, items ‘Custer #2’ and DFL#1, note that ‘close’ is a relative term];**

It would have been obvious to one with ordinary skill in the art at the time of invention to combine the apparatus taught by Yoshida with the ECC cluster functionality taught by Park because doing so would enable effective management of defective areas on BD-WO formatted discs. **[Park, §0010]**

### ***Response to Arguments***

Applicant's arguments filed 7/10/2009 regarding claim 1 has been fully considered but they are not persuasive.

Regarding claim 1, applicant argues that Yoshida does not teach "...defining data from a start location of the data stored in the memory circuit to a location corresponding to a next writable address as a first data portion; defining data from the location corresponding to the next writable address to an end location of the data stored in the memory circuit as a second data portion; and controlling the recording/reproduction section to record the second data portion before recording the first data portion". Examiner respectfully disagrees.

Yoshida does teach "...defining data from a start location of the data stored in the memory circuit to a location corresponding to a next writable address as a first data portion", wherein the data is stored in the memory circuit [§0077] and the "first data portion" is the spare area, referenced in [§0080]. Note that the spare area contains the 'next writable address', i.e. the address that will be written first in the 'spare area.' Also note that the claimed 'next writable address' is not synonymous with a numerically consecutive address as is implied in the arguments.

Furthermore, Yoshida teaches "defining data from the location corresponding to the next writable address to an end location of the data stored in the memory circuit as a second data portion", wherein the second data is the "user data area" referenced in [§0080]. Again note that the claimed 'next writable address' is not synonymous with a numerically consecutive address as is implied in the arguments.

Finally, Yoshida teaches that "record(ing) the second data portion before recording the first data portion", as it is clearly indicated in [§0080] that the user data section is written before the spare area.

Applicant's arguments with respect to claim 2 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDREW J. SASINOWSKI whose telephone number is (571)270-5883. The examiner can normally be reached on Monday to Friday, 7:30 to 5:00, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen can be reached on (571)272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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AJS

/HOA T NGUYEN/

Supervisory Patent Examiner, Art Unit 2627